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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,839	06/20/2006	Akiyasu Nozue	080306.56872US	4231

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EXAMINER
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DIAZ, THOMAS C

ART UNIT	PAPER NUMBER
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4171

MAIL DATE	DELIVERY MODE
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08/11/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,839	<b>Applicant(s)</b> NOZUE ET AL.	
	<b>Examiner</b> Thomas Diaz	<b>Art Unit</b> 4171	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 5 and 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-6 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 October 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/03/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 1-4 in the reply filed on 07/21/2008 is acknowledged. Examiner notes that since the applicant did not provide any arguments the restriction is considered without traverse and is made FINAL.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "a base" from claim 1, line 6 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 2-4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Regarding claim 2,*** Applicant recites on page 24, line 1: "said knock pin for positioning said pinion drive device..." It is unclear whether this knock pin is the same as the one referred to in claim 1. The one in claim 1 is for positioning the swing frame. Is the applicant trying to claim two separate knock pins?

***Regarding claim 4,*** if the applicant is referring to the second knock pin in this claim then there is a lack of antecedent basis for the "said fit-in hole". Is applicant referring to the second knock pin?

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamamoto et al. (JP0926800A; Using machine translation).

(The reference numerals and explanations within parenthesis relate to the prior art)

Applicant claims a swing mechanism (fig.1, 3) comprising:

***Regarding claim 1,***

- A swing frame (fig.1 or 2, element 4),
- An inner race (fig.2, 6) having an internal gear (fig.2, 6a) on an inner circumferential portion thereof and mounted on a side of a base (fig.2, the base of the swing frame can be considered a base)
- An outer race (fig.2, 7) rotatably arranged surrounding said inner race and provided with said swing frame mounted thereon (see fig.2),
- A pinion (fig.2, 12) inserted through a pinion insertion hole (not labeled but clearly seen in fig.2; hole in swing frame through which pinion protrudes) formed in said swing frame and maintained in meshing engagement with said internal gear,
- A pinion drive device (fig.2, 11) for rotationally driving said pinion,
- A pin fit-in hole (fig.10X, 10f) arranged in said swing frame such that a knock pin (fig.10X, 19) fixed on said outer race is fitted in said pin fit-in hole to position said swing frame (see fig. 10X),
- A pin fit-in hole portion (see fig.10X; the general area where the pin is located is considered the portion) through which said pin fit-in hole is formed is arranged on

said swing frame at a location in a vicinity of a place of meshing engagement between said pinion and said internal gear (fig.10X, shows it's in a vicinity of the gearing) such that said pin fit-in hole portion extends toward said pinion insertion hole (fig.10X; shows the portion extends toward the hole which is very close to it) and said pin fit-in hole is located on or in a vicinity of a line that extends through a center of rotation of said outer race and center of rotation of said pinion (not explicitly shown in the drawings, but it is clear that since the pin is near the gearing it would be in the vicinity of a line extending through the centers of rotations of the outer race and pinion).

***Regarding claim 2,***

- Said knock pin (fig.10X, 19) is arranged between said swing frame and said pinion drive device (seen in fig.2 and 10X).
- A center of said knock pin for positioning said swing frame being fitted in pin fit in hole (fig.10X,19) and a center of a knock pin for positioning said pinion drive device (fig.10Y, 18) are each located on or in a vicinity of a line that extends through said center of rotation of said outer race and said center of rotation of said pinion (these pins are in the vicinity of gearing, thus they are in the vicinity of the lines, see fig.9 or 10X-Y).

***Regarding claim 3,***

- Said pin fit-in hole is arranged in a center frame (see fig.10X, hole 10f is in center frame 10) of said swing frame.

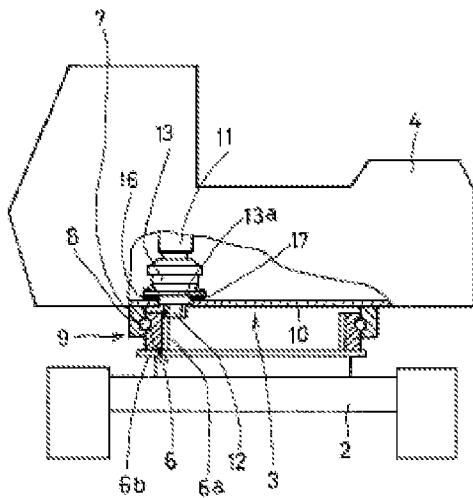
***Regarding claim 4,***

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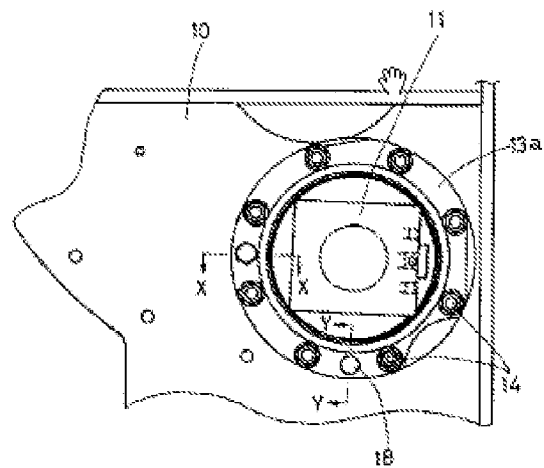
- A fit-in hole (fig.10Y, 17e) in which said knock pin for positioning said pinion drive device is fitted is arranged through a flange portion of said pinion drive device (fig.10Y, 17) and a bracket for mounting said pinion drive device (fig.10Y, 16; examiner interprets the spacer from the translation to be a bracket).

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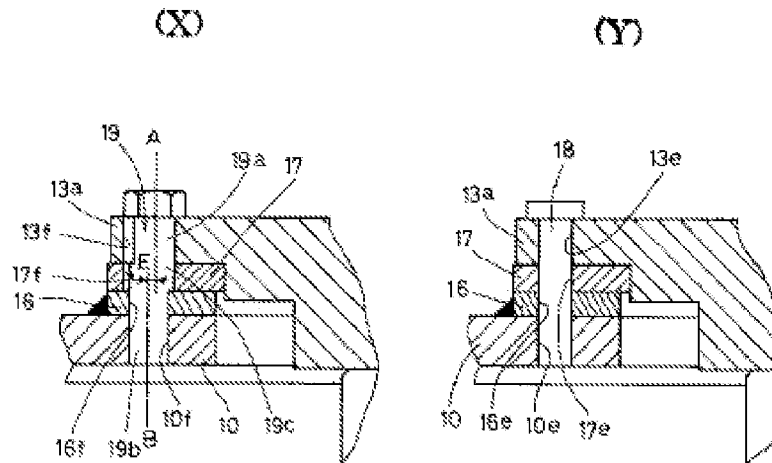
【圖2】



【圖9】



【図10】



Above figures- Yamamoto et al.'s device.

### Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prior art is related to similar swing mechanisms that have adjustability for backlash.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Diaz whose telephone number is (571)270-5461. The examiner can normally be reached on Monday-Thursday 7:30am-6:00pm, Friday's off..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Tarazano can be reached on (571)272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/  
Supervisory Patent Examiner, Art Unit 4171

Thomas Diaz  
Examiner  
Art Unit 4171